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THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

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AROUND THE LAKES.

CLEVELAND.

Captain Angus McDougall, of Rogers & McDougall, vessel agents at Buffalo, was in the city Thursday.

Captain Geo. W. Bessant, last season master of the schooner M. R. Warner, has been appointed master of the steamer Fred Kelley.

Captain C. H. Cummings, late master of the steamer H. Luella Worthington, succeeds Captain J. A. Nicholson in the Business.

Christy Castle, engineer of the steamer Havana, is for the present engineer of the heating apparatus of the postoffice and custom house building.

Captain Packard, last season captain of the schooner A. C. Maxwell, that was wrecked near Goderich, goes master of the schooner M. R. Warner.

Captain J. D. Peterson, of Huron, is in the city, looking after some repairs on the engine of his steamer Columbia. His shadow does not seem to grow less.

Captain J. A. Nicholson has been appointed master of the steamer W. L. Wetmore. Captain Nicholson was formerly in command of the steamer Business.

With the large amount of ore and lumber to come forward and the prospect of a good grain trade the outlook for a very busy and prosperous season for lake carriers is, to say the least, very promising.

There is but little chartering being done at present. Vessel owners will not accept the rates offered, all looking for better rates and better times the coming season than they have had for several years.

The case of Peter Barnard against Patrick Smith will come up for trial before Judge Welker to-day. The action is brought to recover $46.90 claimed due for wages as master of the schooner Selkirk during the season of 1885.

The case in admiralty of Wm. T. Baker et al., owners of the schooner R. B. Hayes, against the tug Thomas Quayle, has been taken under advisement by Judge Welker, the arguments having been concluded on Tuesday afternoon.

Alex Porter has sold to Henry Wallace 1-32 of the propeller Robert Wallace for $2,296.85 and 1-32 of the schooner David Wallace for $1,379.49. Both transfers show a tendency to keep the value of vessel property up.

The improvements to the machinery of the propeller Columbia, Captain J. D. Peterson, at the Globe Iron Works, are about completed, and consist of compounding the engine, steam reverse gear and steam attachment to the windlass.

Judge Welker, of the admiralty court, has made an order for the distribution of the proceeds of the sale of the barge Colonel Brackett. The wages claims and all costs have been paid in full and 41 per cent. has been paid on the other claims.

The case in admiralty of Frank Randall against the tug W. H. Doan, has been settled by Robert Greenhalgh paying the claim and costs in full, and the case has been dismissed. The action was brought to recover $28.76 claimed due for wages as engineer.

O. N. Steele, chief engineer of the steamer Onoko, Quincy Miller, of the J. H. Devereux, and D. Johnson, of the Gliddon, leave to-morrow for Washburn, Wis., to be gone a few weeks, to erect a new engine, built by the Globe Iron Works, Cleveland, for the new elevator at Washburn.

Captain John Rice, one of the oldest marine men on the lakes, and an inspector for Lloyds, is in the city. He will remain here until the arrival of Captain McLeod, when the work of inspecting the vessels in port will be done, after which they will work toward Buffalo.

Captain D. M. Becker, of the firm of D. M. Becker & Co., will go master of one of Mr. Bradley's boats the coming season. We are not prepared to name the boat at this time, but as Captain Becker was a star man when he left the lakes some years ago, and as the Beckers on the entire chain of lakes are all thorough sailors, it is safe to say that he will be given one of the good boats.

The project of putting a fire boat on the river to protect the shipping interests, started by the MARINE RECORD last year, has, after a long fight, finally materialized and contracts let for the building of a boat and providing her with powerful pumps. Messrs. Clapp & Jones, of New York, secured the work on the first bid, but, having placed themselves on record as regards price by furnishing pumps for the New York fire boats, they had to specify a different pump from those in use there, and it seems that the arrangements could not be made satisfactory, so that the next lowest bidder carried off the business. The bids on an iron boat included one by David Bell, of Buffalo, $20,200, and by the Variety Iron Works of this city, $20,990; and the bids on a wooden boat were by the Vulcan Iron Works $18,300, and the Excelsior Iron Works, $18,265, both of this city, and the latter firm secured the chestnuts.

MILWAUKEE.

An important admiralty case has been commenced in the United States court here by the Detroit Transportation Company, represented by Captain James Miller, against F. Y. Yates, of Rochester, N. Y. The suit is brought to recover damages for the detention of the steambarge Iron Duke and consort Iron Cliff at the coal yard of Corrigan & Sons in this city last August, whereby the two boats lost a charter for grain from Chicago to Buffalo. The two boats arrived at Milwaukee August 19 about noon. The Iron Duke went at once to her yard and began discharging her cargo. The Iron Cliff was ordered to a new dock up the Kinnickinnic River. The barge was drawing fifteen feet of water, and when about 1,000 feet from the dock she grounded in thirteen feet of water. She did not reach her dock so as to discharge her cargo until Monday morning, and did not complete unloading until the Thursday afternoon following. In the meantime the Iron Duke had unloaded and was ready to sail for Chicago Friday night, where both boats were chartered to load corn on a 2 cent freight rate the following Tuesday. The three days' delay which ensued released the shippers, and when the boats arrived on the market they were unable to obtain better freight than 1¾ cents. The capacity of the boats was 110,000 bushels. The company claims damages covering the difference in freight and other damages incident to the delay. They claim that Mr. Yates is responsible for the delay, as by the act of chartering the boats he was obliged to give them an unobstracted channel to their docks. The question raised is one that has never before been presented in the courts, and the case will be watched with much interest by marine men as well as shippers.

It was announced at the custom house recently that Ames Carpenter, a Sheboygan veteran, has been appointed by the lighthouse board lighthouse keeper of the pier light at that place, in the vacancy made by the promotion of Captain Peter Danielson to the main light, in the place of Mrs. Pope, who has been removed for persistent neglect of duty after repeated warnings.

MT. CLEMENS.

Special to the Marine Record.

The work on the new steambarge building by the Tonawanda Barge line at Captain William Dulack's yard is being pushed forward very rapidly. She is all in frame and will be ready to plank in a day or two.

The steambarge Florence which sunk last fall, with a load of ship plank for Captain Dulack's new barge, was raised and pumped out. The barge is owned by T. W. Snook & Co., of this city. L.

BUFFALO.

Special to the Marine Record

The Lake Pilots Aid Association, No. 1. Buffalo, held their fourth annual ball at St. Stephens hall, Thursday evening, January 21st. A very select party attended and dancing, to the music of an excellent band, was kept up with great spirit, and enjoyment, proving that the boys could handle and steer a handsome craft ashore, equally as well as on the lakes. The hall was tastefully decorated with bunting and floral decorations by J. E. Williams the decorator, which blended elegantly with the many pretty faces and costumes of the ladies. It was a very happy evening for all and we wish them many more.

George H. Notter, shipbuilder, is rebuilding the barge Hawk.

Sam Donaldson of the firm of Donaldson Brothers. ship smiths, Chicago, has been visiting his relatives and friends in this city the past week.

Martin Duffy, a workman at R. Mills shipyard, who last week accidently fell from the steambarge Donaldson into the drydock and injured his head, is progressing favorably.

Captain Thos. Maytham, M. M. Drake and Mr. Weiner of Buffalo purchased the wreck of the propelle Scotia, which went ashore at Kewenaw Point, Lake Superior. Her fitout, engines and boilers have been recovered. The iron and other material about her will be got up in the spring.

The Western Transit Company's steamships Commodore and Empire State are receiving general repairs, the Idaho will receive a new set of wooden arches and repairs to her shaft, the Fountain City a new set of wooden arches, the Montana a new clutch on her shaft, the Chicago will have her boilers raised and rebedded with cement, the Albany will have her deck calked and two new furnaces on her boilers, all necessaay repairs will be made upon the remainder of the company's boats.

M. Riter, Eagle Boiler Works, will put two new furnaces into the boilers of the steamship Albany. They are doing repairs to the boilers on the Union Company's steam ships Starrucca, Newburg and Waverly, and a big job to the boiler of the steambarge George King.

David Bell, iron shipbuilder and marine engine builder, has just completed a marine engine 20x22 and boiler 6 feet 6 inches diameter 12 feet long, which will be at once shipped to August Reiboldt & Co., at Sheboygan, Wis., to be placed on a new tug. He recently built marine engines 18x20, and steel boiler 6½x12; also a marine engine 22x26, and steel boiler 6 feet 8 inches by 13 feet, for two tugs recently built by James Davison at Bay City. He is building marine engines of the following dimensions, 14x16, 10x12, 9x11, 8x9, 6x7 and casting a number of propeller wheels.

The employes at the Union Drydocks, and R. Mills & Company's Drydock, are as busy as can be getting the repairs done to the vessels in the docks, so as to get them out as soon as possible and make room for others to go in.

The suits against the canal tug Ella B. have been decided by Judge Coxe. The court holds that these small tugs, whose principal business is harbor towing, are neither vessels navigating the canals nor vessels navigating the lakes, and therefore not amenable to the state statute giving liens on those two classes; of vessels but a lien does exist under another and separate statute applicable to any other vessel, providing the lien is enforced within six months after the debt accrued. This decision finds for the plaintiffs in the suit brought for seamen's wages and of David Bell for repairs, but rules out the other claims upon which suits have been brought.

The Lake Superior Transit Company's passenger and freight propeller St. Louis is receiving part new stem, some new arch posts, new forecastle deck and other necessary repairs at the hands of the Union Drydock Company.

Captain John Shaw, of Bay City, has been in Buffalo for a few days, trying to purchase a propeller or to get one built. It is said he offered $105,000 for the propeller Calumet, but could not obtain her at that price.

Captain J. S. Dunham was here from Chicago Wednesday, on insurance and wrecking business. He leaves to-morrow (Thursday) for Schenectady, N. Y., to visit his mother.

Riley Brothers are building a canal scow, 99 feet over all, 17 feet 9 inches beam.

An interesting marine case of long standing came on for trial Wednesday in the county court. In 1882 the propeller John B. Lyon, entering port during the night, ran into and sunk a canal boat lying in Peck slip, belonging to Niles Case. Mr. Case brought suit against Captain Perew, the owner of the propeller, and obtained a verdict for $500 in the county court. On going to the general term on appeal it was sent back for a new trial. The defense made by the propeller is that the canal boat showed no light and the state ruling in such cases is that where the plaintiff is at all at fault he cannot recover; but this ruling is often disregarded by a jury. The ruling in the United States courts is that where both parties are at fault the damages must be divided up.

The Lake Erie Boiler Works are being enlarged. Their present boiler shop is 60 feet wide by 170 feet deep. The new building will be 40 feet wide by 150 feet deep, and when completed there will be placed in it some of the most powerful hydraulic riveting and flange machinery in the United States; also a horizontal drilling machine, capable of drilling holes of any size in boilers of any length or diameter. They are building for the new steel steamship, to be built at the Union Drydock Company's, for the Anchor line, four marine boilers, 13 feet diameter, 11 feet long, entirely of steel, shell plates ¾ inch thick. The boilers are known as the Scotch type. Each boiler will have three round furnaces, each furnace a separate combustion chamber. The boilers will be connected to one super-heater, 10 feet 6 inches diameter, 13 feet high. The shell plates of the boilers and super-heater will be made with butt joints and double strapped and triple riveted on each side of joint with rivets one inch in diameter. They are also building for a tug a marine boiler of steel, 5 feet by 9 feet 6 inches, of rectangular, fire box type; also several large stationary tubular boilers, and have just completed two vacuum oil stills, 10x22, made of steel plate ½ inch thick, beside a number of tanks for the oil works, chemical works, and breweries of Buffalo.

WILLIAMS.

PEQUAMING.

Special to the Marine Record.

I notice that about all of the boats have been mentioned in the RECORD this winter. The tug D. L. Hebard and the J. C. Morse are laid up here. The Hebard is receiving a new water bottom to her boiler and it will be in first class shape. The Morse is receiving some repairs to her boiler. Both boats will receive a general overhauling this winter. James Burt has the contract for fixing the boilers.

The Hebard & Thurber Lumber Company have 43,000,000 feet of lumber to tow this season.

Captain Wayne Hursley will sail the Morse again this coming season, and Captain Jay Hursley the Hebard. H.

AMHERSTBURG.

Last week Captain J. Laframboise received the first installment of the insurance on the tug Stranger, which was burned some months ago.

MARITIME LAW.

Reported by Robert Rae, Esq., of the Chicago bar, for the Marine Record.

COLLISION OF SCHOONERS IN TOW OF TUG—BROACHING TO POOR—SEAMANSHIP—CREW ABANDONING SHIP—COMMISSIONER OVER RULLED—LIBEL DISMISSED—ROBERT LAW VS. WILLIAM T. BAKER, ET AL.

Blodgett, J.

The libellant, as owner of the schooner Lizzie Law, seeks to recover damages sustained by the Law from a collision which occurred on the waters of Lake Huron on the night of June 8, 1882, between said schooner and the schooner R. B. Hayes, owned by respondent.

The admitted facts, are, that on the night in question, the tug Martin was proceeding down Lake Huron with the schooners Lizzie Law, W. S. Crossthwaite and R. B. Hayes in tow in the order named. The course of the tug was about south of east, and the wind about dead ahead, when the wind shifted to north-northwest and a squall came up, which resulted in putting the Hayes and Law into such positions relative to each other as to cause collision.

It is claimed on the part of libelant that the collision was caused by negligence on the part of the Hayes in not having a sufficient watch on deck to properly handle her in the squall; that the sails carried by the Hayes before the squall came up, should have been taken in before the squall struck; that the Hayes when struck by the squall changed her course and went off to the westward, and then changed her course to the eastward and ran into the Law as the Law was following astern of the tug; that the Hayes had no proper lookout, and that the collision occurred by reason of these changes of course, insufficient watch on deck, and want of a proper lookout on the part of the Hayes.

The case was referred to the commissioner who heard the proof, and finds by his report, that the Hayes was at fault and that respondents have excepted and the questions of fact before the commissioner, have been reargued.

The proof shows that the night was pleasant up to half past ten o'clock with but little wind, and that from nearly the same direction in which the tug with her tow was running; that is, about south, or south by east; that all the schooners on the tow had a part of their sails set but trimmed flat aft, so as not to impede the tug; that the Law was towed directly astern of the tug with about five hundred feet of line. The Crossthwaite directly astern of the Law with about the same length of line, and the Hayes with about the same line astern of the Crossthwaite. The Crossthwaite being about 200 feet long, the distance between the stern of the Law and the bow of the Hayes would be about 1,200 feet.

It is difficult to determine from the proof, with even proximate certainty, just how much warning the officers and crew in charge of the decks of these vessels had of the approach of the squall. But, it sufficiently appears that there was some warning or indications of a thunder storm gathering in the northwest, and the crews of all the vessels seem to have done something toward taking in part of their sails. All agree that the squall was of very brief duration, and not very heavy or dangerous at any time. It seems undisputed also, that "the Crossthwaite" ran up and passed the Law on the Law's port side, so that at the time of the collision the Law lay off starboard side of the Crossthwaite.

It is considered on the part of respondents, that when the squall struck them, the Law had taken down her forward sails leaving her after sails up, or part of them, so that when struck by the squall from the north-north-west, she broached to, or came up toward the wind so as to lie directly athwart the course of the Hayes before the course of the Hayes could be sufficiently changed to avoid it.

A careful study of the testimony satisfies me, that the head sails of the Law were taken in, and the mainsail and part of her mizzen were up when the squall struck her, and that with these sails trimmed flat aft, and the squall coming from the northwest, or north-north-west, the Law would naturally broach to or come up to the wind. The only force to prevent her from coming clear around being her tow line attached to the tug, and with the Crossthwaite off to the eastward, or port side, her line would naturally help to hold the Law in this position, that of lying nearly broadside to the wind.

The proof from the tug is to my mind conclusive, that the Law did broach to, as is contended on the part of the respondent, and that while she lay thus broached to, the lookout of the Hayes when from 300 to 400 feet from her, saw her position when the wheel of the Hayes was put to starboard for the purpose of keeping off and passing under the Law's stern, but they were too near to make this manoeuver successful, and the collision occurred.

As to the alleged negligence on the part of the Hayes, the proof satisfied me that her head sails were up and that her main sail had been taken in before the squall struck her; with her sails in this position, she could not have gone off to the westward by the action of a northwest or north-north-west wind, unless her wheel had been put hard over to port, which was not done; that is, all the affirmative proof is that it was not done, nor ordered to be done, and there was no occasion for giving any such order.

The proper thing for the Hayes to do under the cirumstances, was to follow as nearly as she could in the line of the other tows ahead of her, and this the officer of her deck and her wheelsman, testify they endeavored to do, that is they kept their course.

For some unexplained reason, the line of the Hayes was cast off from the Crossthwaite, and I do not see that this in any way affected or brought on the collision; probably when the officer in command of the Crossthwaite saw that he must change his vessel's course to avoid the Law, which had broached to ahead of him, he also thought the line of the Hayes would embarrass him in swinging clesr of the Law, and cast it off for that reason, but this is mere conjecture, as neither party deemed the matter of consequence enough to prove, or attempt to prove, why it was done.

As I gather the facts from the testimony, it seems improbable to me that Captain Leith of the Law could have seen the Hayes off 100 feet to the westward of him, and then seen her change her course and come stem on toward the broadside of the Law. It seems to me much more probable that the Law lay broached to in the pathway of the Hayes, and while her officers and crew were engaged in their effort to get her mizzen and mainsails down, without being conscious of the direction in which the Law was heading, they saw the Hayes coming directly toward their broadside.

If the Law had been heading to the south as she was when struck by the squall, the barges must have been coming from directly toward the Law's broadside, but if the Law broached to, as I conclude she had, then the Hayes, without change of course would be seen coming stem on to the Law's broadside.

The reliability of the testimony from the deck of the Law is much shaken, to my mind, by the fact, that as soon as the Hayes was seen heading for the Law, her officers and crew took to their boats, and when the collision occured, there was no one on the Law except a seaman who had been sent to the mizzen cross-trees to loose the mizzen halyards that had got fouled there. The fact that these men fled so precipitately on the first appearance of danger, certainly very much weakens their reliability as witnesses as to what took place, either on their ship or on the Hayes.

I therefore conclude, that at the time the collision occurred, the Law lay broached to in the course of the Hayes, and was held nearly stationary there by the action of the lines from her bow to the tug, and from her stern to the Crossthwaite, and that her broaching to was in consequence of the bad seamanship of her crew in taking off her jibs, and leaving on her mainsail and mizzen. All the proof concurs that the wind shifted to the northwest before the squall came up; a thunder shower was gathering in the northwest and the premonition therefore was that, if there was an increase of wind, it would be from that direction, and any seaman ought to have known that by taking off his jibs and other forward sails, he was putting his ship in an unmanageable condition, and all the testimony agrees that if the Law's head sails were up and her after sails down she would have been unmanageable, and would have broached to.

It is also urged that the want of a proper lookout on the Hayes contributed to this collision. The proof shows that the watch on deck consisted of the second mate, Wilson, and the wheelsman, and that Wilson acted as lookout. In a quiet night such as the proof shows this to have been, this would have been a sufficient watch for a vessel in tow of a tug as the Hayes was. The captain of the Hayes was disabled by a sprained or broken ankle, and as soon as the weather became threatening, the first mate was called who came at once on deck, and he and the second mate lowered the mainsail, and it was down fully five to ten minutes before the squall struck her; as soon as the mainsail was down, Lawson, the mate, went forward as lookout and remained there till the collision occurred; the second mate remaining near the wheelsman, and when the order to starboard the wheel came from the mate on his sighting the Law broadside to ahead of him, Wilson helped the wheelsman to promptly execute the order. I can not see what could have been done by more men if they had been on deck than was done by these toward averting the collision. The movement of the Hayes through the water was probably accelerated by the wind, and the Law was seen by Lawson, acting as lookout, as soon as the mist or fog would allow, and more men on deck would not have seen her sooner. The Hayes was a logy, dull sailer, that did not respond promptly to her wheel, but not to such an extent as to make her a dangerous vessel toward others in a tow that was properly handled.

It is true that for a few moments while the second mate was calling the first mate, and while they were taking in the mainsail the Hayes had no lookout, but this, it must be remembered, was before the squall struck her, and while all the vessels were in control of the tug, and in their proper places. With the squall, there seems from the proof, to have come a blinding mist or fog, which, momentarily, shut these vessels off from sight of each other, and when this fog or mist passed by with the squall that brought it, the witnesses from the Crossthwaite and the tug saw the Law lying with her head to the westward of her, and the Hayes was approaching her from the direction in which the tow had been running, and the collision occurred. If the Law had not been broached to, it would seem hardly possible that the two vessels would have collided. What the testimony shows as to the sailing and handling qualities of the Hayes confirms me in the conviction that she did not shoot off to the west in a tangent from her regular course, and then as quickly change and come back toward the east, and collide with the Law but her very dullness would have helped to keep her in place upon her course, while the Law, being a quick handler, and carrying a large amount of sail for her size, would, with her head sail off and her after sails set, come up in spite of her rudder by the action of the wind from the northwest.

It, therefore, seems to me, that no such fault can be properly charged to the Hayes as contributed directly to bring about this collision, and I feel compelled to sustain the exceptions to the commissioner's report, and to find the respondents in no way at fault for the damages sustained by the Law.

I may add, that it seems to me the commissioner arrived at his conclusions by placing an undue weight upon the mere opinions of the witness Wilson, the second mate of the Hayes. When this witness testifies as to facts within his knowledge, he seems to be unusually intelligent and accurate, but when he attempts to express his opinions as to whether the deck of the Hayes had a sufficient complement of men to ensure her safe navigation, those opinions seem colored with some peculiar views of his own as to the number of seamen that every vessel ought by law to be compelled to carry.

The commissioner has also attached, as it seems to me, undue weight to the statement of Fitzsimmons, one of the mates of the Law, that the mainsail of the Hayes was up when he came on deck just before the collision; as this witness had no better opportunities for knowing this fact than several others who have testified that it was down—the mere fact that the deposition of this witness was taken by respondents after libellant had failed to take it, should not, as it seems to me, endow his testimony with any more character for truthfulness than if it had been taken by the libellants. In fact I can not see that the question whether the Hayes' mainsail was up or down is controlling, as with all her forward sails set, the mainsail alone without aid from the rudder would not have caused her to run off to the westward, as described by the captain of the Law.

I regret to be compelled to overrule the finding of the commissioner, as no one more fully than myself appreciates his painstaking analysis of testimony, and his usually accurate conclusions as to the facts of a case.

The exceptions are sustained.

The finding will, therefore, be that the collision did not occur by reason of the fault of those in charge of the Hayes, and the libel is dismissed.

Robert Law, Jr, }
Wm. L. Condon, } For Lebellants.
Robert Rae, }
C. E. Kremer, } For Respondents

POLICY OF INSURANCE—"SUE AND LABOR" CLAUSE—UNSEAWORTHINESS OF VESSEL——DEFENSE IN PREVIOUS SUIT—EXPENSES.

U. S. District Court, Southern District of New York.

1. A policy of insurance does not attach if the vessel is unseaworthy when she sails.
2. On suit brought against insurance companies by cargo owners to recover the expenses of successfully defending against a claim on a bottomry bond, the latter set up in defense the unseaworthiness of the vessel. Libelants claimed that this defense should not be regarded as being made in good faith because it had not been made use of in the previous litigation. Held, that as a defense of unseaworthiness would not have been material in the former suits, and as the insurance companies had not at first known of this defence, and as libelants had not been prejudiced by the assistance of the companies in the former litigation, there was nothing which prevented an inquiry in this suit into the question of seaworthiness.
3. As accidents happened to the vessel on the voyage, which, unless explained, would indicate unseaworthiness, and which were not explained, held, that the vessel was unseaworthy when she sailed, the policies of insurance never attached, and respondents were, consequently, not liable to the owners of the cargo for the expenses of defending the former suits.

Brown, J.

The above libel was filed to recover the expenses of defending a suit on a bottomry bond, under the "sue, labor and travel" clauses of certain policies of insurance, issued by the respondents upon the cargo of the "Julia Blake" from Rio to New York. On the voyage, the vessel put into St. Thomas where extensive necessary, repairs were made, in order to procure which a bottomry bond was given to the bank of St. Thomas upon her hull and cargo. The vessel with her cargo uninsured subsequently arrived in New York. The vessel, freight, and cargo, was thereupon libeled for the enforcement of the bottomry bond. Practically no defense in that suit was made as respects the ship and freight. The controversy as regards the cargo was carried to the Supreme court, where the decisions of this court and of the circuit court were affirmed, releasing the cargo on the ground that no communcation was had with the owners of the cargo, prior to executing the bottomry bond (the Julia Blake, 16 Blatch. 472; 107 U. S. 418.)

At first the insurers employed proctors and counsel to defend against the claims on bottomry. They appeared for the owner of the vessel and answered in his behalf as owner; and also as agent, or carrier in behalf of the cargo. Some months afterwards the owner of the cargo himself intervened and answered separately, by proctors and counsel of his own; and after the decree of the district court, he represented mainly if not solely the interests of the cargo in that suit. The insurance companies had previously agreed to pay any sum which might be fixed by the average adjusters as general average. The libelants now sue for their expenses and counsel fees in that litigation.

In the present action the respondents have set up in defense the unseawortiness of the vessel when she left Rio, and allege that the policies consequently never attached. As the claim in suit rests upon the stipulation of the policies only, there can be no recovery if the policies never attached, or became operative as respects the cargo. It is urged that this defense ought not to be regarded as made in good faith, because no such ground was taken in the previous litigation; and because the insurance companies did not act upon that theory, but during the progress of the action, in the district court at least, were active in defeating the bottomry bond upon other grounds. Two answers are given to this contention which I think are sufficient. No issue of unseaworthiness would have been material in the former action. On the contrary, the more unseaworthy the ship, the greater would be her need of repairs at St. Thomas, where the bottomry bond was executed. The facts affecting the question of the unseaworthiness of the ship at Rio were not at first known to the insurers. When they were, in a measure, apprised of the facts, this question was stated to the libelants by the counsel of the insurers, as an existing question affecting their liability for insurance, although not envolved in the pending litigation. But that merely afforded to the insurance companies an additional ground of defense, as against the cargo. Considering the difficulties of establishing that defence before a jury, the insurance companies could not be considered as wholly indifferent, whether the claim of bottomry was defeated upon another ground. The assistance of the insurance companies in the former litigation for a time, in no way misled the libelants, or induce them to incur any expense which they would not otherwise have incurred. There is no element, therefore of estoppel in the case, nor do I find anything in the circumstances which precludes an inquiry into the seaworthiness of the vessel, which is for the first time presented in this suit. On that point the evidence of the master, whose deposition was taken in this suit, but who was not examined in the former suit, is very strong, and shows clearly that the vessel was grossly unseaworthy when she sailed. There

are several considerations which suggest a suspicion of great exaggeration in the master's testimony; but after making all possible allowances for such exaggeration, the undisputed facts concerning the condition of the vessel when she arrived at St. Thomas, and the absence of any severe weather, would seem to necessitate the inference that she was unseaworthy when she left Rio. When sailing in only a fresh breeze, as would appear, first her topmast, and then her crosstrees gave way and fell down, and portions of the foremast were carried away. The testimony is that they were exceedingly rotten, and many parts of the hull were in a similar condition. Such extraordinary accidents require an explanation, or the vessel must be held to have been unseaworthy when she sailed. No explanation was given; and it is not suggested that a satisfactory explanation through any extraordinary weather or otherwise could be proved. I am obliged to hold therefore, that the vessel was unseaworthy when she left Rio, and that the respondents never became liable upon the policies, and, consequently, are not answerable for the expenses claimed. The libel is therefore dismissed with costs.

December 31, 1885.

CHARACTERISTICS OF MISSISSIPPI RIVER STEAMBOAT MEN.

BY THE SECOND ENGINEER.

Written for the Marine Record.

PART IX.

Engineers are always looking for burnt boilers, and on mountain boats carry extra sheets and rivets along with them, and many of the engineers can put in a sheet as easily as a professional boiler maker, while a "horse shoe patch" is a thing hardly worth a consideration, that is, as far as the putting the same on is concerned. The theory advanced as to the real cause of boilers burning, that is, the reason why the scale will always deposit itself upon the sheets directly over the strongest heat, is as varied as are the methods of operating upon a boiler after it has been burned. Some engineers believe that if steam is permitted to descend below a given point, when the boat is cooled down a burnt boiler is sure to follow, while others think that so long as there is a sufficient flame under the boilers to maintain a circulation, all danger is obviated. Others, again, feel that if they "blow out" at certain times and never have over a certain pressure of steam, they are safe, while others feel that "to pump up" when they first fill the boilers, and not to put a fire under the boilers at once is sure to cause them to burn, while every engineer feels that to "run into the bank and clean out hot" is sure to be followed by deteriorating results.

Another cause which has many adherents is that the firemen permit the "green coal" to get up against the shell of the boiler, cooling it off in that particular spot, resulting in the settling of the scale there. However, whatever may be the true theory, the burning of boilers on our southern and western rivers is not uncommon, nor is an engineer's reputation injured from it. Any river engineer knows what it is to take off the "man-head" and find on about the second or third sheet from the forward end, scales all heaped up as if they had been thrown there by the sudden subsiding of a whirlpool, for they will be found nearly always on edges, and nearly always as fine as can be, which, when cemented together by the mud and sediment of the boiler, become so tenacious that it is impossible for the water to reach the iron of the boiler beneath them.

As it is not the desire of the writer of these articles to write anything touching engineering only so far as it is necessary to illustrate the characteristics of the engineers themselves, he will not give any opinion regarding burning of boilers upon our rivers, any more than to suggest that some of the followers of each of the many theories advanced, has had his boilers burned, proving that his was not the only reason why boilers burn. The writer has been with many engineers, who, when the boat was lying at the bank for freight, or laid up for the night, would not permit the steam to go down below one hundred and ten pounds. However, every boiler that is burned is not patched, far from it, and as an illustration, the writer was "striker" on a three-boiler boat, each boiler having six flues, and was running from St. Louis, Mo., to Shreveport, La., on the Red river. Having to lie at the mouth of Red river for several days for water, the boilers were cleaned, and from there the run was made to Shreveport and back to Memphis, where, at 8 p. m. the boat was landed. Between 8 p. m. and 3 a. m. the boilers had been cleaned out and steam raised again, which did not give the boilers much time to cool. The boat started up the river against a "big raise," hence stiff current, and at supper time that evening, or fifteen hours after cleaning, the "captain of the watch" reported a burnt boiler, which on investigation it was found was not only true, but, the two outside boilers were quite badly "bagged," and the middle boiler leaking badly. The middle boiler looked as if it had been heated red hot, and that some one had taken a sledge and gone into the boiler and drove the shell down, and finely breaking a hole through, the "bag" being cone shape, and about as large as a man's hat. The boat was landed, and the fires drawn, and when the steamer was down to about sixty pounds, planks were put in the hot furnace and the engineer went in and with a sledge "drove up" the two outside boilers, that is, hammered the shell back to its normal, cylindrical condition, the pressure on the inside acting as a cushion to prevent the shell being "bagged" the other way. The water was then blowed out, and the boilers cooled off by cold water, after which the engineer made (for they are all blacksmiths, at least, some one of the engineers is a blacksmith, on nearly every steamer), a bolt, the upper part being V shape, to clasp the flue. A hole was then drilled through the "bag" of the burned boiler, and this bolt run through it, a nut being put on the outside next to the fire, while the V part was clasped around the lower flue, a strap put across, and all then tightened up. The next step was to prevent the bolt head from burning off and to prevent the boiler from burning more, for the tendency would be to do that, as the scale would naturally settle in the lower part of the shell. Therefore, the engineer took brick and built a wall around the burned place, from the bottom of the fire bed up to the shell of the boiler, so that no blaze could strike that spot, after which steam was raised, and the boat proceeded on to St. Louis, after four hours' delay to repair boilers.

THE OLD MODEL BOAT.

BOSTON, January 21, 1886.

To the Editor of the Marine Record.

I enclose herewith another letter to the Secretary of the Navy. I will send you next week an account of the passage of the old boat as far as she has gone. She is now frozen in the ice near the mouth of the Delaware river. She has been in ten gales since she left Boston and has come up to the programme of safety as contained in the publications from my pen in your paper.

J. W. N.

Hon. William C. Whitney, Secretary of the Navy:

Dear Sir: I would not be so persistent in my letters to you if I did not positively know that I am right, and that the old system of building ships is all wrong in all its particulars.

The manner in which ships have been formed and built has become so engrafted to the mind of man that the idea of its being wrong is so distasteful that no one will listen to the fact that there is another way to form and build ships, notwithstanding the vast proportion of ocean disasters from the earliest days down to the present time. That there is another way has now been made most clear by the old, crude model boat which has been in all the gales since the 4th ultimo, and is now frozen in at Cohansey light, near the mouth of the Delaware river. It would use too much space to mention all of the incidents of her one month's experiences. I will only mention one of them. The party had expected to have gone through the Raritan canal, and had taken on at Boston three experienced men to take them to Perth Amboy. When there they paid the men all off but the pilot. But they had delayed so long that the canal was closed, and if they continued on they must go outside, around Cape May, and did so. They left Perth Amboy with a north wind, and when about fifteen miles from Barnegat the northeast gale (the one in which it was thought the life saving crew of Newport was lost) set in. The pilot says that it came on in a squall and so quickly that it jibbed his sail which knocked down the smoke stack. Night had set in, and he had no one to help him, as none of the company would come on deck, and he could not leave the wheel, and the boat had no power left except her small auxiliary engine, and his jib. I have said much in my letters to you in relation to the power of the buoyant clothed plough vessels in difficult times to take care of themselves. If a vessel can be in a worse position than was this little boat at that time I cannot imagine what it could be. She was, in comparison with the mountain waves she was in, but a fly or small shell, and close on a lee shore with a house on her fifteen feet square and six high, to drive her on shore, and no place of shelter near, her crew was composed of green men, and, as the pilot says, they could not be induced to come on deck. He did not himself understand the powers of the boat; if he had, he would have kept on and gone round Cape May, which he could have done with safety. But he made up his mind to run her over Barnegat Bar, which had only six feet of water on it; which he did. His description of that passage clearly proves the power of the boat's buoyant wing clothing: her displacement at the time was not far from ten tons; the buoyancy to hold up that weight was inclosed mainly in her ploughs under her. In addition to that buoyancy she had above her water line broad spread but low, available buoyancy at the time not far from twenty tons. The bar for nearly one mile was but a mass of foam with no density, probably not one-half of that of water, and would not have floated any boat as ordinarily formed; on the contrary it would have swallowed them up from the fact that they have no buoyancy which can be acted upon so as to float them in such a light mass of tumbling white water. But the little boat's twenty tons of reserved buoyancy enabled her to pass safely over that bar to the amazement of the life-saving people.

Yes, sir, there are two ways to build and form a ship—a right way and a wrong one. The rule is that in all things the wrong way always comes first. Ships have been no exception to that rule. The working model which I am building and have mentioned in my letter of the 14th inst., will clearly illustrate that fact, and one like it would prove a valuable acquisition to your department, even if you do not build from it as a comparison. It may seem an inconsistent assertion when I say that there is no one part of a ship right for rough waters, and further that powers of propulsion, as applied in my new theory, can not be used on a ship as now built. Nor can the powers of propulsion, as now used, be applied to one on the new theory to advantage. I have said also in my letters that one theory is the direct opposite to the others. No ship can ever be safe unless her powers of all kinds are auxiliary to each other, especially the sails. Of what use would sails have been to the Katahdin? Of what use would sails have been to the Germanic, in the gales they were in? Or how could they have been made auxiliary? If they could have carried them they could not have held a course where they would have been of most use, i. e., in the troughs of the waves. Both of these vessels clearly illustrate this fact, more especially the Katahdin, as her course was in the troughs of the waves, and while on that course her bulwarks were stove in and her coal washed overboard, and her hold partly filled with water, and she was only kept alive by being head to the wind. One of these new vessels would have been in her glory at such a time, i. e., in the troughs of the waves, and none of this water could have come on her as her wing buoyancy would have prevented that; she could not have had her bulwarks stove in, as she had none; she could not have rolled so as to distress her sails, as her ploughs would prevent that. The form of other ships is such that it is not possible to prevent them from rolling, and rolling destroys the efficiency of the sails. But this can best be illustrated by the model I shall bring with me. In all the wrong parts of a ship there is no one thing so wrong as the arrangement of their sails, and to make them auxiliary to each other and to steam is impossible as ships are now constituted. The model will show the only way that sails can be made auxiliarily useful. The storms of the last month (in which the old boat has been out) afford the most ample proof of the powerlessness of vessels, as now built, to contend with the forces of the ocean, and the disasters, as reported in that time, are unprecedentedly great. Auxiliary propulsion calls for a different application of power than is now used, and such cannot be used on vessels as now formed. The powers of the wind at times are far more valuable and economical than steam, and when it is up to its greatest power with a hull on the principle of this new theory which is adapted to its powers, it will propel so fast that no boiler can be made which would be in proportion to the ship, which can supply steam to keep up with the wind speed.

No written description of mine can illustrate that which I desire to prove. I do not possess the powers of language to do it, from the fact that it is all of it so unique, that there is nothing to compare it to. It is for this reason that I have made the model. I will only add that I know that it will prove worthy of consideration. If I did not positively know it I would not presume to trespass on your valuable time. Permit me to again ask you if you will devote a portion of your time to look into the matter? It covers all of the life essentials of a vessel, and should be made known.

Yours most respectfully,

JOSEPH W. NORCROSS.

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No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
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No 26, Conneaut Accommodation	†4 25 P M	
Westward.	**Arrive.**	**Depart.**
No 1, Fast Limited Express	*12 15 A M	*12 25 A M
No 23, Mich Express via Sandusky	*2 15 A M	
No 3, Chicago Express via "	§6 00 A M	6 30 A M
No 25, Mich Accom Norwalk		†6 30 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 30 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*11 00 A M
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CLEVELAND, OHIO, THURSDAY, JANUARY 28.

RAIL AND WATER ROUTES.

It is believed by those most interested, those who are the most likely to seek the truth, that the efforts of the railroads to destroy the lake carrying business have finally been declared futile by the manages of the rail lines and that the policy has been changed. The railroads, in the war to demonstrate the purpose spoken of, have to a great extent, crippled themselves and at the same time done material injury to the water lines. While both competitive factions have had aid from the government treasury, neither one has been able to profit by it for the reason that they have been carrying at non-paying rates. This war has been closely watched by railroad stockholders in England, who have given aid and sympathy to the rail lines for many and good reasons. One of these reasons is their money interest and another their desire to have little new tonnage put afloat by the United States for the foreign trade.

In commenting on this subject the Liverpool Journal of Commerce says: "The United States lake and river tonnage is the most formidable fleet in the world, surpassing in point of tonnage the combined mercantile navies of any two countries, excluding Great Britain. In fact, the mercantile tonnage of France, Spain and Italy, together falls short of the United States coasting marine. Moreover, the fleet of coasters, of various kinds, built for conducting the traffic of the extended coasts and long rivers is admirably adapted to the diversified variety of business it was constructed to perform, It is in point efficiency and equipment of vessels and accommodations and comforts for those on board second to no fleet in the world. The coasting fleet is moreover thoroughly American, both in the increasing traffic it is intended to carry on and the peculiar style, models, and rig of the vessels themselves. No doubt the experience gained by American shipbuilders in drawing fine models has also enabled them to build yachts, which from the days of the America to the Puritan, have kept the prize for fast sailing. It is very easy just now to understand correctly what is exercising the mind of the people of the United States."

One of the considerations, which has scarcely received as much attention as it deserves is the effect upon railway interests, of the influences that have confined the operations of the American vessels chiefly to the coasting trade, and prevented them from participating largely in commerce with foreign countries. It is only a comparatively small amount of the coasting trade that could be conducted by some of the existing railway lines and that is not now carried under conditions that necessitate sharp competion. If the available foreign fields for effort were more extensive and remunerative, it is probable that they would attract at least some of the sea-going vessels now engaged in the coasting trade, and thus diminish the pressure to which a number of rival rail and water routes are now subjected. There are also many United States industries and classes of traffic which would doubtless be more flourishing if the existing facilities for exportation to foreign markets from various ports were improved; and it is possible that some railway lines would derive a double benefit from such an increase of oceanic shipping if it was supplied by vessels now engaged in the coasting trade.

The Liverpool Journal of Commerce adds that there are at all times promising markets for American products in some parts of the world which will never be fully developed by operations conducted in foreign ships. This subject has a close relation to the material welfare of the American people. Their prosperity depends, in a very large degree, upon the extent to which foreign markets can be provided for their surplus products and the existing capacity to produce many useful articles greatly exceeds the existing home and foreign demand. Meanwhile very active efforts are being made by various foreign governments to provide satisfactory substitutes for the articles now taken from America. It is necessity rather than choice that makes Great Britain such a large purchaser of American breadstuffs, provisions, and cotton, and her statesmen and many of her merchants would prefer to make correspond ing purchases from competing British Colonial dependencies if their location and industrial development permitted such a change. What has already occurred in the substitution of wheat from India for United States wheat may be the forerunner of simi lar limitations in other directions. France and Germany have also imposed severe restrictions on some branches of the American export provision trade. In brief, while the Americans have been materially diminishing their demand for European manufactures, some countries have been equally successful in checking their imports of staple products of the United States. Instead of looking for a remedy to a reduction of their tariff, which might inflict great injury on manufacturers without materially benefiting the agriculturists, the Americans are seek new markets wherever recommended to they can be found, and this, it is urged can never be done while direction, management, and manipulation of foreign trade is left mainly to and under the control of representatives of foreign interests. These seem to be the leading points exercising American thought just now.

The arguments of the writer being generally well chosen and in the main correct, are but further evidence that the shipping interests of the United States should be advanced by the government, and now that it has been demonstrated that the fittest is bound to survive, there should be harmony between the representatives of the national water routes and railways. The incessant rivalry between the two great industries, which has become historic, should cease. No other portion of the world has ever witnessed such struggles as have been waged for the control of the through traffic of this country. Nowhere else have railroads reduced rates to a standard low enough to make them formidable rivals of long water routes. The water lines can and will move heavy freight long distances cheaper than it is possible for rail lines to do it; therefore it is patent to all that the water lines will survive every effort to destroy them, while the interest which undertakes to drive shipping from the lakes and rivers will impoverish itself. Canals, either under national or state jurisdiction, will become strong allies of the water routes, in the struggle for the carrying business of the country, and when a national connection is made between the lakes and the Mississippi river and thence to the Gulf of Mexico and the coasts of South America in reciprocity trade the victory must be declared for the great interest of navigation. To make this possible at the smallest cost the outlet most natural and feasible should be sought and improved.

HENNEPIN CANAL.

The Hennepin canal scheme is again coming rapidly and strongly supported to the front, and as the river and harbor bill was defeated in Congress last year, largely in the interest of this project, it must be considered by the friends of the river and harbor bill as an obstruction measure and be guarded against accordingly. While there is no reason to deny that Chicago must speedily take steps looking toward the retention of her great grain traffic, and that a completed Hennepin canal will give that city great advantage and assistance to do so, there are other questions involved which should be duly considered, when $7,000,000 of public money is involved. If the proposed Hennepin canal is constructed with a view of making it the outlet from the lakes to the Mississippi river and the Gulf of Mexico, the project will not answer the purpose, but if it is to be constructed with a view to retain the grain traffic for Chicago, produce which is now finding the way to Duluth, and which will before many years be poured into store houses on Green Bay, it will serve the purpose conceived by citizens of Michigan, and will then become a purely state improvement. It will not serve the purpose of furnishing the extended water route which must be established to compete with the railroads.

When the waterways convention was in session in Chicago recently, it was known as the Lake and Mississippi River Commission, and its object was ostensibly to consider, aid and advance the connection of the lakes and the Mississippi river. But before proceeding far in their deliberations a resolution was presented suggesting a change of the name to that of the Hennepin Canal Commission, and the resolution had many warm friends, showing the force of local interest as against matters of national importance. It has been claimed many times in these columns that a Hennepin canal, as conceived, would never improve any waterway. A writer in the Inter-Ocean of a recent date, who is apparently master of the question, makes the assertion that all who understood the importance and value of a water connection between the lakes and the Mississippi river would believe that Chicago was opposed to the connection.

"There is no question," says the writer, "of the feasibility of connecting the waters of Lake Michigan with the Mississippi river by the Illinois river and the Desplaines, one of the tributaries of the Illinois river, that runs within a few miles of the lake, the route used by La Salle and Joliet to pass, in their canoe, from the lakes to the Mississippi river." If this work were done steamers and barges from all the tributaries of the Mississippi would be exchanging freight at our docks. If the rivers were improved and connection made with the lake so that the lake steamers and barges and the Mississippi river steamers and barges could pass from the lakes to the Gulf of Mexico, free of toll, the lake vessels, tow boats, steamers, and barges that are idle and their crews idle, or thrown into competition with other laborers for five months of each year, would both be employed in moving the products of those latitudes and exchanging them for those of the tropics, employing capital and labor. The coffee alone that is used so extensively in this country would be sufficient to load all the vessels on the lakes on their return trip, to say nothing of the innumerable productions of the south. Those cargoes could be delivered here without breaking bulk. They could be delivered to the consumer here cheaper than it is now done, and pay a fair compensation to those employed in the trade. This would be building up home industry and employing captial and labor, which would be a benefit to both. The largest portion of our trade with the South and Central American States is going to Europe on European bottoms and then returns to our eastern seaports and thence to the west.

The men who are advocating the pet scheme mentioned in the caption of this article should not be led into defeating improvements of a national character for a local project which is not essential and never will become a fact.

THE TREASURY TO PAY THE FEES.

Mr. Dingley is taking the position relative to the relief of American shipping that S. S. Cox occupies in relation to the life saving service, a position that is certainly an enviable one when it is considered that the average congressman pays no more attention to this great interest than he does to the most petty local affair. The bill introduced by Mr. Dingley for the relief of shipping from many of the burdens in the way of fees and other responsibilities has been finally considered by the shipping commission, and after some amendment Mr. Dingley has been instructed to report it to the house for action at the earliest moment. The text of the bill provides as follows:

Section 1 abolishes on July 1, 1886, the following fees to collectors and other officers of customs, inspectors of steam vessels, and shipping commissioners for services to vessels of the United States, to wit: Measurement of tonnage and certifying the same; issuing of licenses or granting certificates for registry; record of enrollment, including all indorsements on the same and bond and oath; indorsement of change of master; certifying and receiving manifest, including master's oath; granting permits, granting certificate of payment of tonnage dues; recording bill of sale, mortgage, hypothecation or conveyance, or the discharge of such mortgage or hypothecation; furnishing certificate of title, furnishing the crew list, including bond; certificate of protection to seamen; bill of health; shipping and discharge of seamen as provided by section 53, Revised Statutes, and section 21 of the same; apprenticing boys to the merchant service; inspecting, examining, and licensing steam vessels, including inspection certificate and copies thereof, and licensing of master, engineer, pilot, or mate of vessel. (The fees amount to about $300,000.)

It is provided that these officers shall make a return to the Secretary of the Treasury of their services performed and where paid, wholly or in part by fees, that the Secretary shall grant them compensation from the Treasury, so as to make their compensation what it would have been before the passage of the act.

Section 2 authorizes shipping commissioners to ship and discharge seamen for the coastwise trade.

Section 3 amends section 10 of the shipping act of 1884 so as to authorize the payment of advance wages to liquidate any just debt for board or clothing contracted prior to the shipping, not to exceed two months' pay.

Section 4 extends the time of the limited liability section of the shipping act of 1884 so as to cover all vessels in the inland trade, except canal boats, lighters, and barges.

Sections 5, 6, and 7 substitute small penalties for certain violations of the navigation laws, where now a forfeiture of the vessel is involved.

Section 8 provides that foreign vessels found transporting passengers between places or ports in the United States, when such passengers have been taken on board in the United States, shall be liable to a fine of $1 for each passenger landed.

Section 9 empowers the Secretary of the Treasury to remit the fines provided in the previous sections when the offenses were not wiltully committed.

Section 10 construes the provision of law allowing a drawback on bituminous coal used as fuel by steam vessels to apply only to vessels of the United States and to vessels of such foreign countries as allow a similar drawbahk to vessels of the United States.

Section 11 amends the tonnage tax section of the shipping act of 1884, which authorized the President to suspend the collection of the tonnage duty on vessels entered from any foreign port in North and Central America, etc., that has abolished similar taxes on American vessels, and extends this tender of an abolition of tonnage tax and lighthouse dues to all countries that have abolished or will abolish similar lighthouse dues and taxes on American vessels entering their ports.

Section 12 directs the President to cause this tender to be made known to foreign governments.

THE report of the light house board, a copy of which we have received by courtesy of Charles E. L. B. Davis, Captain of Engineers, tenth lighthouse district, is the most elaborate and interesting that has ever been issued. The report notes all new lights and aids, and all repairs, and has a finely executed series of lighthouse maps, showing the location and areas of illumination of the lights, and the location of fog signals and other aids to navigation. There is also a set of diagrams which serve to show in detail the construction of the new light at the mouth of the Detroit river. In addition to the valuable and complete statistical information contained in the work, the reports of Commander P. E. Chadwick, U. S. N., who was assigned by the board to watch the experiments of the British light house establishment regarding the merits of oil, gas and electricity as light house illuminants and the operations of Hell Gate electric light are quite interesting.

THE thirty-fourth annual meeting of the supervising inspectors of steam vessels is in session, Inspector General Dumont presiding. After the transaction of routine business a committee, consisting of Messrs. Hays, Dugan, Asbury, Daley and Marden, was appointed to consider a request from the Board of Trade and a number of lumber merchants at Chicago for the transfer of the headquarters of the supervising inspector of the eighth district from Detroit to Chicago, where it was located prior to 1870, when it was moved to Detroit.

DAVID MORRIS WILSON.

Master D. M. Wilson, the only son of Captain Thomas and Mary P. Wilson, and for whom the steambarge D. M. Wilson (Captain Wilson's first steambarge) was named while the gentle boy was a baby, some thirteen and a half years since, passed to the arms of the Great Shepherd who said "Suffer little children to come unto me," on the 13th of January, after a lingering and painful illness, of heart disease. By his winning ways, gentle disposition and cheerful temperament little David had succeeded in attracting the love of all who knew him and the patience of the little sufferer during his hours of sickness was remarkable. In his every day life he was not as other boys, for while he liked play and amusement, he was not bound up in the frolics of childhood, as the companions of his choice were his kind father and mother, hence his thoughts and actions were far in advance of the ways of a youth of his tender years. He early evinced a talent for music, and could read, and play on a piano very difficult pieces of music. In fact little David was an extra ordinarily bright boy, and any one who reads this and who has suffered a loss of this nature, the pride of his life, can fully and truly sympathize with the bereaved parents and friends.

THE Marine Hospital Bureau has issued instructions to discontinue the inspection stations at Rouses Point, Mooers junction and Ogdensburg.

[*Around the Lakes Continued from 1st Page.*]

DETROIT.

Special to the Marine Record.

Jan. 27.—It is always in order to say something about the weather, and on this subject there can be no disagreement, and it can with safety be recorded that last Friday morning was the coldest of the winter, dropping ten degrees below zero in the suburbs of the city, and as the Indian remarked a long time ago, to stand in an open field it would be necessary to button up your jacket.

Since my last letter there has been a vessel sale which is worthy of special record. The schooner was the Seaman which was sold by John S. Minor, of this city, to Captain George H. Humphrey, the owner of the steamer George A. Marsh, for $3,500. She was one of the best built vessels on the lakes and was constructed at Cleveland on the old river bed in 1848 and not in 1850, as the registers have it, as I was an eye witness of the launch. Tisdale & Johnson were the builders, who, the same winter, built a vessel afterward named the Everett. Both were from the same model, only that the former had two more frames than the latter; otherwise they were precisely the same. Captain Hi VanTassel took command of the Seaman, and Captain John Varner the Everett, and sailed as long as she lasted, and just here let me remark that no better sailor ever took charge of a vessel's quarter deck, so far as seamanship is concerned. Of course the Seaman, not long since, was thoroughly reconstructed.

The marine engineers' banquet at the Biddle House Thursday night was an enjoyable affair. There was a good attendance, and everything passed off smoothly. It was the twelfth annual festival.

It seems to be the opinion of those familiar with the surroundings of the propeller Oconto that ere spring time arrives she will go to pieces. She was built at Manitowoc fourteen years ago and was of 350 tons burden.

Captains John Prindiville and C. W. Elphicke, of Chicago, called here the latter part of the week, homeward bound.

Captain George McLeod, of Buffalo, marine inspector, left here yesterday morning, on a tour of inspection, taking Toledo in his rounds.

Captain George Merritt, of the steambarge Inter Ocean, left Saturday for Chicago where the barge is laid up, to superintend fitting and repairing her for ensuing navigation.

Captain W. H. Rounds, of Chicago, was in this city yesterday, en route homeward, also Captain Carrington, of Toledo.

John J. Jarvis, the well known sub-marine diver, will follow in the line of his profession the ensuing season in the waters of Georgian Bay and the north shore of Lake Superior, having entered into contract with Jerry McCarthy, of Buffalo, for the entire season. Mr. Jarvis stands among the foremost in this line of business; can dive as deep and stay under as long as the best of them.

An important admiralty decision, involving a large sum, was rendered in the United States district court in this city on Saturday. The case in question was a collision between the propeller Clarion and the Grand Trunk railway steamer Lansdowne, on the Detroit river, early in the morning of the July 14 last. The Lansdowne was crossing from the Detroit side of the river, having on board an eastern bound passenger train, Captain W. C. Sullivan being in charge. The steamer crossed the river diagonally for the Grand Trunk slip at Windsor. Captain Sullivan stated that when about the middle of the river he first saw the Clarion's port light and gave signal, anticipating that the Clarion would keep her course and allow the Lansdowne to cross her bows. The Clarion, however, returned two whistles, signifying that she wanted to pass to starboard and at the same time her wheel was put hard to starboard. The engines of the Lansdowne were stopped and reversed, but in less time than it takes to write it the Clarion came on with great force and struck the former a glancing blow on the port side, forward of the wheel, damaging a portion of the rail and the upper works a distance of forty feet abaft the wheel. The damage to the Clarion, in a measure, was slight, as she proceeded on her voyage to Buffalo. On reaching Sandwich Point, however, immediately afterward, she struck on the shoals and was delayed some three hours when she was worked off. The repairs to the Lansdowne were about $10,000 which was allowed her in the decision of the court, also a claim for detention which has been referred to a commissioner, and will, it is thought, amount to as much more. During the course of the trial the judge had on either side of him Captain Warner, of the revenue steamer Fessenden, and Captain Francis A. Cook, light house inspector, to enable him to arrive at an unbiased decision.

The result of the case between the propeller Sanilac and the schooner Southwest alluded to in my last letter, was also given, which was against the Sanilac, and the damages referred to a commissioner. The import of this case was that on the night of November 7, 1884, the tug Hercules was coming down the Detroit river with the Southwest in tow. The Sanilac had started out from Detroit, bound up, and headed diagonally across the stream toward Walkerville. By a conflict of signals they came together and the Southwest was considerably damaged. As in the former case the judge had on either side of him on the bench Captain William Thorne and Captain John Edwards to assist him in arriving at a correct decision.

The price for docking vessels the ensuing season, as concluded upon at a recent meeting of dock owners at Buffalo, will be an increase of the 10 per cent. over those of last year.

Arrangements are being carried out at this port for the construction of a sailing yacht which, for speed it is anticipated, will clean them all out. She will be 40 foot keel, and will be supervised by Captain Charles Boston, of this city.

The libels in connection with Murphy's line of tugs are now before the admiralty court in this city, and will doubtless consume the whole of the present week if not longer. There are many attendants at the trial and much interest manifested.

HALL.

SANDUSKY.

Special to the Marine Record.

The steambarge being built here this winter for David Dussault is progressing rapidly. Considerable carpenter's work remains to be done, but the hull is all up. The boiler has not yet arrived from Buffalo, where it is being built. Weather permitting, the boat will be ready for active service about March 1st.

New legs are being put on the boiler of the tug Myrtle.

Nothing is being done now at Monk's shipyard. The work of putting in new ways in order to be able to pull out large vessels, that have heretofore been compelled to go to Detroit, Cleveland, and other places, was commenced late last fall, but the heavy storms of a few weeks ago did so much damage to the work that had already been done, that it was deemed advisable to wait until the ice moved out of the bay before proceeding with its construction.

The woodwork of the tug Bennett is receiving a general overhauling. The pilot house is to be moved back several feet to make room for a new gangway; she will also receive a new fender strake. The Bennet will be engaged in the fishing business, as well as towing.

The boiler for the steamer Louise will be finished about the middle of March. It will be 6½ by 14 feet; the seven main flues will be, three 8 inches and four 10 inches in diameter, and 92 3 inch flues. The fire box will be 60x70 inches. The boiler will be of steel, with 65,000 pounds tensile strength, with steel dome 6 feet and 4 feet 8 inches in diameter.

The new side wheel steam yacht, being built at Fremont for John G. Smith of that place, by one of Sandusky's experienced ship carpenters, will have a 16 horse power engine. She will be capable of carrying forty passengers and be handsomely finished. Cost, when completed, $2,000.

The islanders have commenced their kick through the city press, regarding freight and passenger traffic on our local ferry boats, claiming that exhorbitant charges are made. They say it costs $2.50 to get a ton of coal from Sandusky to the islands.

F. K.

MARQUETTE.

It is thought that ore and furnace men are waiting for the large mines here to set the prices of Superior ores for the coming season. The prices at which the Lake Superior, Republic, Cleveland, and Chapin mines will sell the product for the summer will govern the prices, not only for the smaller mines in the Menominee and Marquette ranges, but also in the Gogebic and Vermillion districts. The Minnesota Iron Company, owning the Vermillion lake mines expect to ship 350,000 tons or more ore next summer. The Colby, in the Gogebic range, will mine and ship from two to three hundred thousand tons. More ore will be mined this year than last, with the indications that prices will be somewhat stronger.

PORT HURON.

The exports from or through the district of Huron during the year 1885 amounted to $4,745,297, and the total business footed up $6,962,179.78. The duties assessed on bonded goods for the year were $279,131.42. and the duties paid $64,337.39.

Few people have any idea of the number of people crossing St. Clair river at this point during the year. We are informed that the Port Huron Ferry Company's boats, the Beard, Beckwith, Dormer and Conger, carried over 500,000 passengers in 1885.

The steambarge Oscoda will go out of Dunford & Alverson's drydock in about two weeks. Her repairs amount to over $7,000.

BAY CITY.

Special to the Marine Record.

There is very heavy snow all around Bay City and vicinity. It has snowned and blowed all the week with the exception of one day.

We have got a boom in the shipbuilding business up here. Wheeler's yard has got an order from the Bay City & Cleveland Transportation Company for another steambarge, and has the drafts all made. Following are the dimensions: Length 180 feet, beam 34 feet, hold 13½, to be iron strapped with 8 inch by ⅝ inch iron for top cord around entire hull, and to be diagonally strapped with iron 4½ inches wide by 4½ inches thick from top cord down to bilges, the keelsons to be 12 inch by 14 inch, and sister and rider keelsons 12 by 12 inch. She is to have three masts, sails on two forward ones, the after one to be used as a derrick for hoisting. There will be a small house aft of the pilot house forward fora chart room and for the master. The engine, a compound, will be built by Christie & DeGraff, of Detroit, and will be 24 and 36 by 48 inches, and have one boiler, to be 12 feet long by 12 feet in diameter. She will be laid down as soon as the Hawgood & Avery barge is completed far enough to launch. This steamer is to take the place of the steambarge Christie which has been sold by these parties, report says, for $40,000, so you can mark another one for Bay City.

Up at Davidson's shipyard they are laying the keel for what they call a log boat or a boat to carry logs. She will be of the following dimensions: Length over all 260 feet, breadth of beam 50 feet, depth of hold 12 feet. She is to have four center gunwales, and to be gunwale side of the following dimensions: Will commence on the bilges with 18 inch by 18 inch oak to form the bilge, then her floor timbers of 12 inch by 18 inch oak are put in and dovetailed in the bilge keelson, then a 16 inch by 16 inch oak on top of that and bolted down through floor timbers and through bilge strake, then the balance of the gunwale is to be Norway pine 10 inches by ten inches, heavily bolted edgewise up as far as the deck frames, then a piece of 12 inch by 16 inch oak on top of the Norway pine and bolted down through. This top piece is to receive the deck beams which, when crossed, are to be dovetailed in to the top piece or clamp strake, then there is a heavy tamarack knee under each beam to be securely bolted to beam and side; there are four center gunwales and a center truss. The gunwales are to be of Norway pine, and to be trussed on each side and bolted through. The center truss is to be of oak and in a diagonal form; and crossed at right angles and bolted through and through. The deck beams are to be of 9 inch by 14 inch oak and 9 by 12 oak. The decking to be of 6 inch by 8 inch Norway pine, and the plank sheer to be 8 inch by 12 inch wide of oak. She will have a vessel bow and vessel stern or modeled bow and modeled stern, and will have sheer enough to make her a fine looking model when in the water. She will have a raised deck forward, 7 feet high from the main deck and have cabin room enough there for the accommodation of the crew, and also room enough for a very fine steam capstan and steam windlass. Both can be used to load and to heave around the docks. Her quarter deck or her after deck will be 8 feet from the main deck and will be fitted up for the cooking, dining, store, and spare rooms. This vessel will have three spars and have steel wire hoisters or conveyors and arranged so they can work eight hoists at a time and by the conveyors on the spars can take the log out of the water, hoist it on deck and place it in any position so as to save the labor of handling on deck. Power will be supplied by a 25-horse power engine and boiler for handling logs and working capstan and pumping. The machinery is so arranged that she can be loaded in a day and unloaded in six hours. The cargo will be all on deck and she will carry eight hundred thousand feet in case logs are not to be carried. She will be able to carry about two million feet of lumber, about six hundred thousand in the hold and the balance on deck. She will cost about $30,000, including machinery, and will be completed about the 1st of May. She is built by James Davidson for the Emery Lumber Company, of Tawas and Crow Island. They have bought about two hundred millions of standing pine in Georgian Bay and will supply their mills mostly with logs from there with this log boat. Davidson has got a large tug of great power now on the stocks, almost completed, for the purpose of towing this log boat. The tug is of the following dimensions and power: Length 100 feet, beam 20 feet, depth of hold 9½ feet. Her engine is a 24 by 26 inch, high pressure, to be supplied by a boiler 7 feet 8 inches in diameter by 14 feet long, and will have all the latest improvements. She is a very fine model, and will be housed in in about the same manner as our river tugs. It is the intention of this firm, if this boat proves a success, to build more of them and make a business of supplying other mills if necessary. To-day the outlook for good logs in the Saginaw Valley is very poor, and if this scheme can be made to pay it will be a godsend to the mill owners who have converted all their standing pine into what the dock wollopers howled about last summer, that is, "sawdust."

Captain William Barrett will sail one of the L. & S. T. Company's barges the coming season.

Captain James Bennett will sail the steambarge Missouri the coming season.

One of the shops of Captain James Davidson's shipyard, was burned on the night of the 22d.

G.

SHEBOYGAN.

In regard to the removal of Mrs. Eva Pape, one of the keepers of the lights at Sheboygan. Collector Krez said that it was nonsense to ascribe anything political to the affair. "Mrs. Pape was removed," he said, "on account of neglect of duty, on recommendation of the inspector of lights, by the lighthouse board, which is a non-partisan body. Mrs. Pape's successor was appointed in the regular line of promotion, and has always been a Republican."

A DISPATCH from Duluth says: There is no hope of Congress doing anything this year to narrow the rectrictions on Canadian bottoms. Some hope is indulged in that the joint commission, to be appointed on the fisheries and other subjects by the two governments, may agree upon a reciprocity treaty broad enough to let Canadian bottoms enter our trade without restrictions. This cannot be adopted, however, in time for the coming season's business. The Canadian boats will continue to run here, depending for traffic on flour and wheat exported by way of Montreal.

A NEAT and practical book has been published by Captain D. P. Dobbins, to whom we are indebted for a copy. Among other interesting matter contained in the book is the history of the Dobbins life boat from its conception to the present complete and admirable self righting and self bailing boat that is in use at many of the life saving stations, the merits of which are truthfully set forth in the book by testimonals from the keepers. We trust the Dobbins life boat will come into universal use by the government at all the stations.

IT appears that Lake Superior will have two more lines of vessels next season. The Detroit, Grand Haven & Milwaukee will run three steamers, the W. J. Averill, W. A. Haskell, and Walter L. Frost, between Sarnia and Duluth, while W. P. Bottsford & Co., of Port Huron, will run the Roanoke, Nebraska, and Colorado between Duluth and Port Huron, for the Grand Trunk railway, using the Bottsford elevator at Port Huron for storage purposes.

CAPTAIN HAYWARD of the United States steamer Quinnebang, who only recently joined that vessel, is dead. His death is cabled from Alexandria, Egypt, but no details are given. Captain Hayward was well known in this city, having for many years been in charge of this lighthouse district. His many friends will regret to hear of his death.—*Oswego Times.*

J. L. Schrader the Buffalo Courier marine reporter being somewhat anxious to get ahead of the MARINE RECORD, on marine items, got into a hole in the ice, in close vicinity to Michigan street bridge when crossing the river last Monday. He luckily escaped with a wetting and we hope he will not sustain any further inconvenience therefrom, as he is one of the best.

SMALL STEAM YACHTS. Steam Launches, Marine Engines and Boilers, and Propeller Wheels. Send for free Illustrated Catalogue. CHAS. P. WILLARD & CO., 282 Michigan St., CHICAGO.

HISTORY OF LAKE NAVIGATION.

BY J. W. HALL.

Written for the Marine Record:

CHAPTER LIV.

In continuation of the principal events connected with the navigation of 1856 it may be remarked that this season inaugurated the first departure of a lake vessel from the upper lakes for an ocean voyage to Liverpool, the schooner Dean Richmond, with a cargo of wheat, taken on at Milwaukee, in the month of July, commanded by Captain D. C. Pierce. She had a prosperous voyage over, demonstrating the fact that lake vessels are as well adapted for sea voyages as those exclusively confined thereon. Other vessels had superseded the Richmond in making ocean voyages from Lake Ontario, the first of these being the brigantine Pacific, from Toronto in 1844, with a cargo of wheat and flour for Liverpool, commanded by Captain George Todd. From this period up to the time of the Richmond's departure in 1856, there were nine others which left for salt water voyages, bound for Liverpool, save in two instances, the revenue cutter Dallas to New York in 1847, and the barque Eureka from Cleveland, bound to San Francisco, California, which vessel was commanded by Captain Wm. Monroe. The others during the interval for Liverpool were the schooner Lillie, Captain Hunter, from Kingston, in 1848; the schooner Sophia, Captain Gaskin, from Kingston, in 1850; schooner Cherokee, 400 tons, Captain Gaskin, from Toronto, in 1853; barque Arabia, 450 tons, Captain John Calder, from Kingston, in 1854; schooner Cataragui, 550 tons, Captain Robert Gaskin, from Kingston, in 1854; schooner Eliza Mary, 850 tons, Captain R. Gaskin, from Kingston, in 1854; barque Reindeer from Toronto in 1855; also the propeller Ontario (omitted), which went to California from Buffalo in 1850.

But few of the lake pioneer sea voyagers are left, and those few have been converted into tow barges, bereft of their former comeliness.

The most deplorable disasters occurring during the season of 1856 were:

The propeller Toledo, laden with merchandise, which foundered at her anchors off Port Washington, with forty-two lives. The loss on cargo and hull was $170,000.

The propeller J. W. Brooks foundered in Lake Ontario during a heavy gale and all on board lost, twenty-two lives. The loss on cargo and hull in this instance was $90,000.

The barque J. V. Ayer, laden with wheat, foundered in Lake Michigan, and ten lives found watery graves. She was commanded by Captain Thomas McClelland.

The schooner Mary Maria was wrecked on Presque Isle, Lake Ontario, and seven lives lost.

The schooner Iowa, laden with wheat, foundered in Lake Michigan with nine lives. Loss on hull and cargo, $33,000.

Captain R. C. Bristol, an early steamboat master on the lakes, and subsequently in the forwarding business in Chicago, died at Brooklyn, N. Y. In his day he had commanded, respectively, the steamers New York, James Madison, and Niagara.

Captain C. C. Stanard died suddenly on board the steamer Western World, while on the pilot house as the steamer was leaving her dock at Detroit, 1854.

Captain John Baxter died at Black River, O.

Captain Thomas P. Folger died at Brooklyn, N. Y. He had commanded the ship Milwaukee, and the steamer Rochester beside other vessels.

Captain John Shook, a well known steamboat master, died at Huron, O., in 1856, aged 60 years.

Captain Peter Smith, owner and master for several years of the schooner Stranger, died in California in 1856.

Captain Chauncey Stillman died in Cleveland in 1856.

Captain T. J. Titus, a popular steamboat master, was drowned from a small boat in Lake Michigan, while in command of a propeller in 1856.

Captain O. D. Simons, half brother of Titus, and retired steamboat man, died in Hamburg, N. Y.

On Lake Ontario, during the season of 1856, there were six steamers plying on the American side, controlled by the Ontario & St. Lawrence Steamboat Company, of which E. B. Allen, of Ogdensburg, was president, and Captain James Van Cleve secretary and treasurer, at Lewiston. The steamers made daily trips, calling on the downward passage at Charlotte, Oswego, Sackett's Harbor, Kingston, thence to Ogdensburg, and returning by the way of Cape Vincent, Toronto, thence to Lewiston, and were as follows:

Bay State, 1098 tons, Captain John Ledyard.
New York, 1200 tons, Captain R. B. Chapman.
Northerner, 905 tons, Captain R. F. Child.
Cataract, 577 tons, Captain Jas. B. Estes.
Niagara, 473 tons, Captain John J. Morley.
Ontario, 832 tons, Captain H. N. Throop.

The above steamers made connection with the cars running to Niagara Falls and Buffalo. Plying on the Canada side of Lake Ontario, composed of British steamers, were:

Peerless, 400 tons, Captain James Dick, Toronto and Niagara.
Zimmerman, 500 tons, Captain D. Milloy, Toronto and Niagara.
Champion, 350 tons, Captain W. Wilson, Toronto and Oswego.
Europa, 600 tons, Captain J. Murdock, Toronto and Oswego.
Mayflower, 300 tons, Captain D. Sinclair, Toronto and Oswego.
Highlander, 250 tons, Captain D. McBride, Toronto and Rochester.
Maple Leaf, 398 tons, Captain R. Kerr, Toronto and Rochester.
C. J. Robinson, 315 tons, Captain Jacob Young, Coburg and Oswego.
Arabian, 350 tons, Captain Slater, Hamilton and Prescott.
Kingston, 400 tons, Captain C. Hamilton Hamilton and Prescott.
Magnet, 500 tons, Captain H. Twohy, Hamilton and Prescott.
Passport, 400 tons, Captain Harbottle, Hamilton and Prescott.
Brownsville, 400 tons, Captain C. Perry, Hamilton and Montreal.
Monarch, 400 tons, Captain A. Sinclair, Hamilton and Montreal.
Provincial, 300 tons, Captain Thos. Kidd, Hamilton and Prescott.
Cora Linn, 150 tons, Captain Sutherland, Kingston and Port Trenton.
Lady Elgin, 200 tons, Captain Nosworthy, Kingston and Belleville.
Bay of Quinte, 250 tons, Captain F. Carroll, Kingston and Belleville.
City of the Bay, 200 tons, Captain W. R. Monroe, Kingston and Belleville.
Sir Charles Napier, 200 tons, Captain G. F. Creighton, Kingston and Cape Vincent.
Trenton, 260 tons, Captain H. Dewitt, Port Trenton and Montreal.
St. Helen, 100 tons Captain C. Chrysler, Port Trenton and Montreal.

There were also two fine steamers named, respectively, the Canada and America, 800 tons each, and precisely of the same lines and features, which run from Hamilton to Brockville, in connection with the Great Western Railway of Canada, but were subsequently sold and dismantled after a brief term of existence. The number of craft, owned by Canadians in 1856, was 47 steamers, 17 propellers and 171 schooners, aggregating a total of 42,000 tons, and a valuation of $3,500,000. The tonnage of British craft is rated about one-third less than American measurement. Steamers plying on the St. Lawrence in 1856 were the following:

Banshee, 300 tons, Captain T. Howard, Kingston to Montreal.
New Era, 200 tons, Captain P. G. Chrysler, Kingston to Montreal.
Ottawa, 270 tons, Captain J. R. Kelley, Kingston to Montreal.
St. Lawrence, 200 tons, Captain T. Maxwell, Kingston to Montreal.

In the month of August, 1856, a beautiful and unusual sight presented itself on Lake Ontario, and was seen by those on board the steamer Bay State, while on the passage from Niagara to Genesee River. It was known as a lake mirage, and was of more than usual splendor. It took place just as the sun was setting, at which time some twelve vessels were seen, reflected on the horizon in an inverted position, with a clearness truly surprising. The sky was overcast with a thick haze such as is seen before a storm, and of a color favorable to represent upon a darkened background clearly the outlines of the rigging and sails as perfectly as if the vessels themselves were actually transferred to the aerial canvass. This unusual phenomenon lasted until darkness ended the scene.

The following vessels passed out of existence during the season of 1856, without repeating the names of those noted above:

Steamer Northerner, sunk by steamer Forest Queen in Lake Huron, with twelve lives, $23,000.
Steamer British Empire, sunk by steamer Fashion in the St. Lawrence, $26,000.
Steamer Northern Indiana, burned on Lake Erie, fifty-six lives lost, $100,000.
Steamer Niagara, burned off Port Washington, Lake Michigan, and sixty lives lost, $70,000.
Steamer Welland, burned at Port Dalhousie, Lake Ontario, $50,000.
Steamer Brothers, wrecked on Thames river, $5,500.
Steamer John Jay, burned in Lake George and twelve lives, $10,000.
Steamer Fashion, lost at Bayfield, Lake Huron, $12,000.
Steamer Mazeppa, lost near Goderich, Lake Huron, $8,000.
Steamer Superior, lost on Lake Superior, with thirty-five lives, $25,000.
Steamer Golden Gate, wrecked at Erie, and one life lost, $45,000.
Steamer Monarch, wrecked near Toronto, $50,000.
Steamer Brunswick, sunk in Lake Michigan, and one life lost, $33,000.
Propeller Tinto, burned on Lake Ontario, and eighteen lives lost, $31,000.
Propeller Paugassett, burned at Dunkirk, $11,000.
Propeller Protection, sunk by steamer Boston in the St. Lawrence, $28,500.
Propeller Falcon, burned at Chicago, $30,000.
Propeller Sandusky, wrecked at Conneaut, $28,000.
Propeller M. B. Spaulding, burned at Buffalo, $68,000.
Propeller Louisville, burned in the St. Lawrence river, $30,000.
Propeller St. Joseph, wrecked near Fairport, $46,000.
Propeller Lord Elgin, lost on Lake Ontario, $26,000.
Brig Oxford, sunk by propeller Cataract in Lake Erie, five lives lost, $10,000.
Brig Sandusky, lost in the Straits and seven lives, $18,000.
Brig Seneca, wrecked at Kalamazoo, $7,200.
Brig A. R. Cobb, wrecked near Chicago, $8,000.
Brig Nebraska, sunk by propeller Oriental in Lake Michigan, $7,000.
Brig F. C. Clark, wrecked at Manitowoc, $9,000.
Brig Arabian, wrecked on Lake Huron, $36,000.
Brig Cumberland, wrecked at Bayfield, Lake Huron, $12,000.
Schooner Wm. Penn, wrecked at Point au Pellee, $3,000.
Schooner Marengo, sunk off Middle Sister, Lake Erie, $4,000.
Schooner Kate Hayes, lost on Spectacle reef, Lake Huron, $34,000.
Schooner Signal, wrecked at Oswego, $4,000.
Schooner Maid of the West, lost on Lake Michigan, $7,000.
Schooner J. E. Shaw, lost in the Straits, $20,000.
Schooner Ohio, lost off Dunkirk, with one life, $6,000.
Schooner Colonel Camp, sunk by propeller Plymouth in Lake Michican, $37,000.
Schooner Caledonia, lost on Lake Michigan with six lives, $4,000.
Schooner Defiance, sunk by brig W. Treat in Lake Huron, $38,500.
Schooner J. W. Ross, wrecked at Buffalo, $5,000.
Schooner War Eagle, wrecked at Ashtabula, $2,500.
Schooner Maria Hilliard, wrecked at Death's Door, Lake Michigan, $6,000.
Schooner Europe, wrecked near Chicago, $5,000.
Schooner General Taylor, lost near Chicago, $12,000.
Schooner Bohemia, wrecked at Port Washington, Lake Michigan, $38,000.
Schooner Magnolia, lost on Gull Island, Lake Michigan, $12,000.
Schooner St. Anthony, wrecked near Goderich, $36,000.
Schooner Canadian, foundered in Lake Erie and eleven lives lost, $8,000.
Schooner J. G. King, wrecked at Kalamazoo, $5,000.
Schooner Trenton, lost on Lake Michigan, $7,000.
Schooner Egyptian, lost at Point au Pellee, $36,000.
Schooner George M. Chapman, wrecked at Oswego, $26,000.
Schooner Perry, lost on Lake Ontario, $13,500.
Schooner Industry, wrecked near Port Colborne, $4,000.
Schooner A. J. Brown, wrecked at Presque Isle, Lake Ontario, with two lives, $14,000.
Schooner Orion, lost at Point au Barque, $27,000.
Schooner Kansas, foundered in Lake Michigan with eleven lives, $6,000.
Schooner Cherokee, foundered in Lake Michigan and ten lives lost, $5,000.
Schooner Montgomery, wrecked on Lake Ontario, $18,000.
Schooner Robert Bruce, lost at Port Burwell, $28,000.
Schooner Thomas Bradley, lost near St. Joe, $13,000.
Schooner Allegan, wrecked on Lake Ontario, $12,000.
Schooner G. T. Williams, lost on Lake Ontario, $5,000.

Losses on hull and cargo during the season of 1856, $3,126,744; lives lost, 407; number of disasters, 597.

HEARD BY A PORT HURON MARINER

A young gentleman just from the East hearing of the big tide on Tuesday went down to the river to see if it was appreciable at this point.

"Why, the tide is still runniug down," he exclamed as his eye-glasses dropped off his nose.

"What did you remark, sir?" asked an old mariner from Port Huron.

"The tide—the tide is still on the ebb; doesn't it ever come up the other way?"

"Well, I have never seen it," replied the tarry son of the unsalted seas, as he hitched away and leaned against a fence to keep from falling overboard.

The man from Massachusetts bay looked with surprise first at the river and then at the sailor, and allowed himself to be gently towed up Woodward avenue by his cane.—*Detroit Tribune.*

Marquette special to the InterOcean says: Particulars of the largest sale of standing pine ever made in this vicinity have just been published. The Hon. H. C. Thurber, mayor of this city, sells 36,000 acres on Dead River here to T. H. McGraw & Co., of New York; consideration, $360,000 cash. The land is estimated to have 200,000,000 feet of standing pine. It will require an outlay of from $250,000 to $300,000 for improvements on the river and for a railroad five miles long to make it accessible. The same company bought 7,000,000 feet of logs now in the Chocolay river here from Mr. Thurber. This means a vast outlay of money here next season, and the building of the largest mill on the peninsula in this city.

LEGISLATION PROPOSED FOR THE RELIEF OF SHIPPING.

Eight bills have been introduced in the United States Senate, and all except two referred to the committee on commerce.

1st—Senator Cockrell's bill, intended to facilitate the negotation of bills of lading and other commercial instruments and to punish fraud therein.

2d—Senator Cockrell's bill for the relief of captains, pilots engineers and mates of steam vessels, by authorizing the Secretary of the Treasury to cause to be paid to such officers, or their heirs, the sums paid by them as license fees and for certificates from May, 1, 1871, to April 5, 1882, less the sum of 50 cents for each certificate of license.

3d—Senator Call's bill to amend section 4400 of the Revised Statutes, so that vessels under five tons, and used for private purposes, and not carrying passengers for hire, shall not be subject to license.

4th—Senator Beck's bill, amending the statutes so as to authorize the purchase of foreign built ships by citizens of the United States, for use only in the foreign carrying trade.

5th—Senator Frye's bill, providing for the allowance of a sum not exceeding one dollar per each nautical mile traveled by vessels carrying United States mails to foreign countries, or between ports on the Atlantic and Pacific coasts, such service being performed by the lowest bidder under contracts made by the Postmaster General. Such vessels must be of American registry, and said contracts not to exceed a term of four years, and the Government to be privileged in case of war to purchase or charter said vessels.

8th—Senator Beck's bill to limit fees for the consular verification of invoices. It provides that no greater fee or tax than $2.50 shall be collected by a consul for authenticating an invoice of merchandise.

7th—Senator George's bill to protect employes and servants engaged in foreign and inter-state commerce. This bill provides that any sailor or other employe engaged to navigate a vessel engaged in the foreign or domestic commerce of the United States may receive from his employer or master damages for injuries sustained through carelessness or negligence of his employer.

OFFICIAL NUMBERS AND SIGNAL LETTERS.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION, WASHINGTON, Jan. 18, 1886.

To the Editor of the Marine Record:

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Department, during the week ended, Jan. 16, 1886:

Official Number.	Signal Letters.	Rig.	Name of Vessel.	Tonnage: Gross.	Tonnage: Net.	Home Port.
			SAIL VESSELS.	.....	.....	
126,334	.....	Sc.	Clara,	7.74	14.48	Lake Charles, La.
140,813	.....	Sc.	Laura F. B.,	16.32	7.35	Pensacola, Fla.
81,103	.....	Sc.	W. H. Edelman,	86.42	15.51	Galveston, Texas.
81,104	.....	Sc.	W. Parnell O'Hara,		82.10	Boston, Mass.
			STEAM VESSELS.			
106,398	.....	St. p.	Alert,	158.98	158.98	Louisville, Ky.
126,335	.....	St. p.	Corneal Goldman,	172.19	172.29	do
157,172	.....	St. p.	Dayton,	.....	105.63	Chattanooga, Tenn.

JARVIS PATTEN, Commissioner of Navigation.

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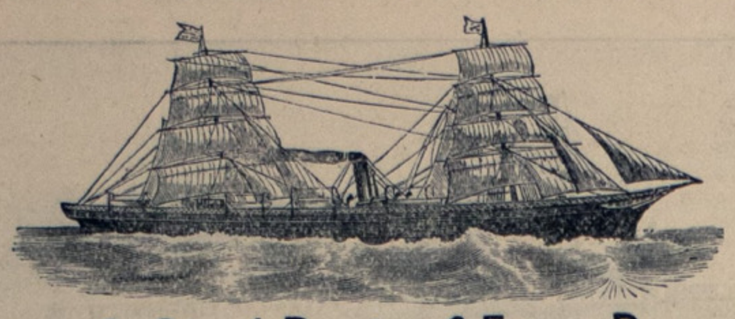

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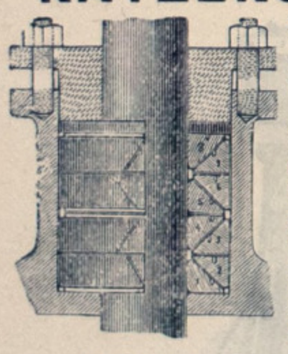

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This tug is 52 feet over all, 13 feet 3 inches beam, and 6 feet 6 inches depth of hold. Engine, 13x14; steel boiler 4 feet 6 inches diameter by 9 feet long. The hull was built by Geo. H. Notter, Buffalo, and is an excellent model and well built. The tug is nearly new, having done only five month's work since she came out new last summer. She has a poop deck and finished cabin fore and aft, and classes A1. Price, $4,500. Address MARINE RECORD OFFICE.

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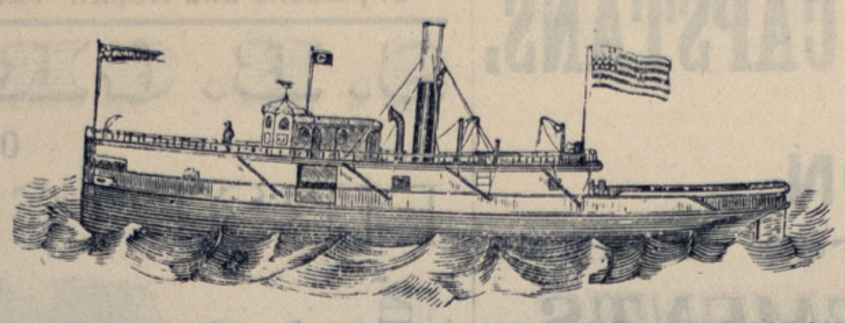

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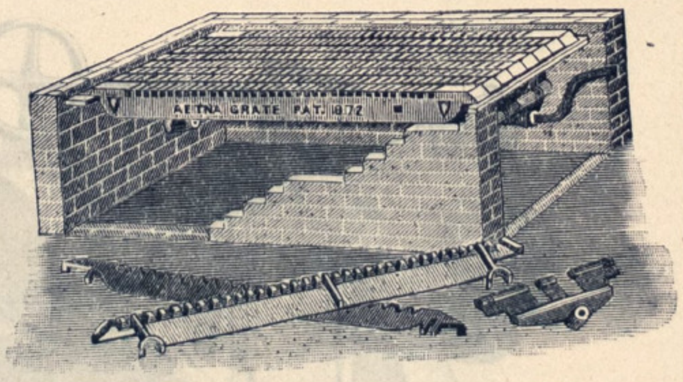

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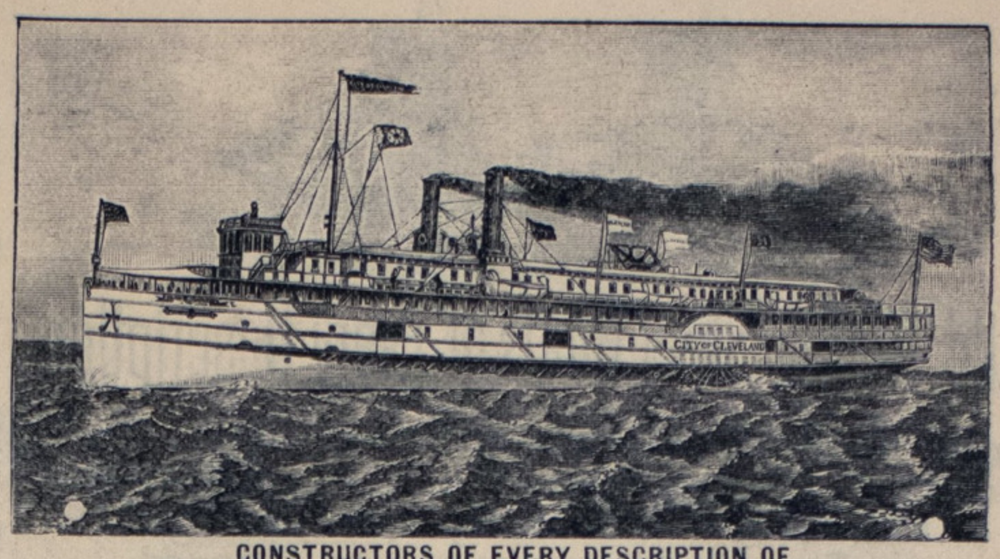

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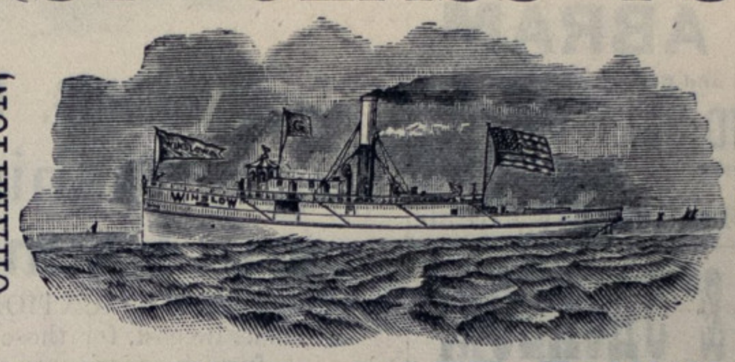

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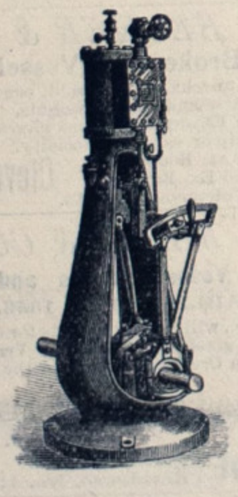

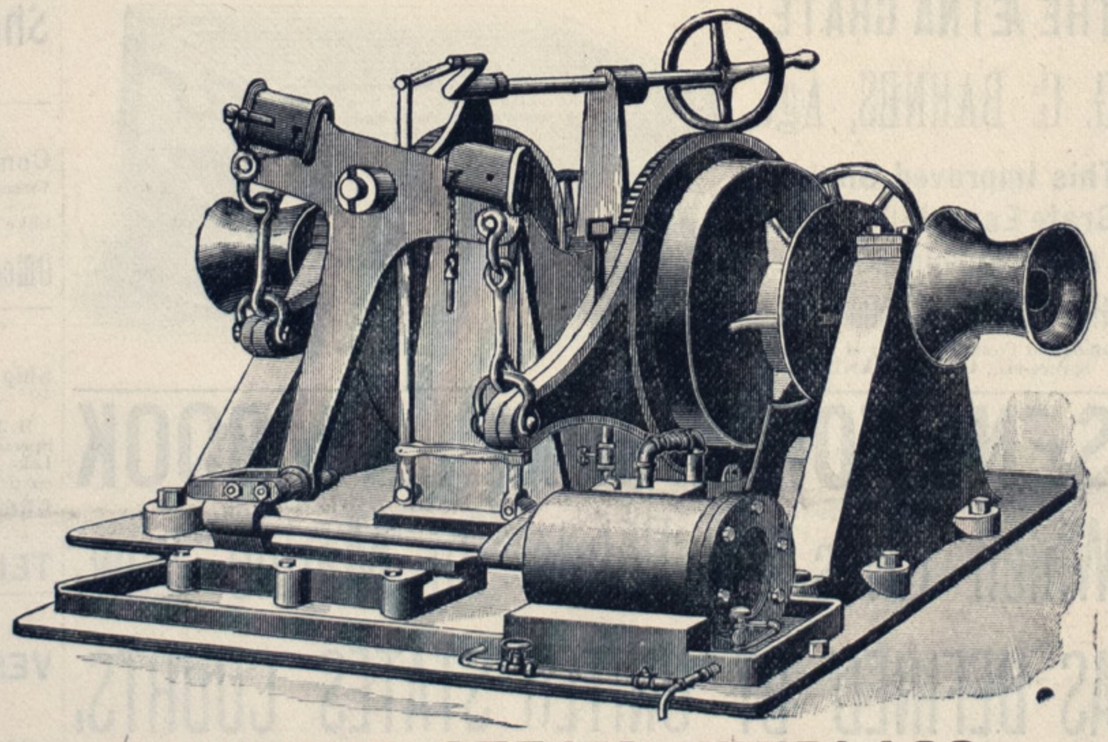

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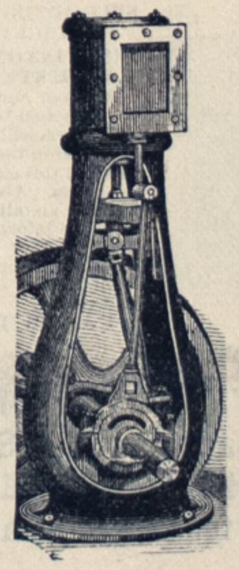

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